Web-based Training for University Faculty and Staff In Blackboard Collaborate

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Abstract: The down turn of the economy has significantly affected the nature of work in colleges and universities across the country. Economic limitations have forced universities to find other means to facilitate meetings, with colleagues and clients over long distance. Blackboard Collaborate, an online synchronous virtual platform was purchased by the University of Hawaii to reduce the cost of face-to-face meetings and to promote distance learning. Even though, faculty and staff were given licenses to utilize this online tool, many are unsure and unfamiliar with many of Blackboards features. The purpose of this study is to provide a web-based instructional training module to assist first time users in Blackboard Collaborate. The focus was to assist participants in navigating and completing five introductory training modules. Overall, participants gained positive experiences and provided recommendations to improve site organization and site content.

Introduction

Due to the failing economy many universities according to (O'Meara, Kaufman, & Kuntz, 2003) whose budgets rely on increasingly limited funding support, are facing difficult financial challenges. Budget constraints, can no longer support travel and the frequency of face-to-face meetings. Universities are being pressured to immediately address the financial burden at their institutions. Therefore, institutions are examining costs, capabilities, use and effectiveness among technology programs and are looking upon a variety of distance delivery systems, which simulate online virtual communications. Learning environments or web-conferencing tools like Blackboard have been comparable to the traditional face-to-face environments. The University of Hawai'i at Manoa College of Tropical Agriculture and Human Resources (CTAHR) recently purchased Blackboard Collaborate as a means of communicating at a distance with colleagues and clients.

The seamless transition of training faculty and staff to a virtual platform comes with its challenges. Limited staffing and heavy workloads discourage faculty and staff to invest time in learning new technology tools. Scheduled trainings for Blackboard were offered but faculty did not attend. Due to missed training opportunities, this study was conducted to provide a web-

based instructional training module to assist first time users in Blackboard. This would fill the void in learning how to use the tool at their convenience and independently. Using Blackboard is essential in helping transition faculty and staff towards a virtual learning environment. Developing specific training needs such as addressing key features would be beneficial for teaching in instruction, facilitation and collaborative work.

Supporting Literature

Institutions commonly adopt Blackboard as a tool for web- conferencing to facilitate learning and interactive experience. Bower's (2011) supporting research states,

> *Web-conferencing tools enable online engagement such as those that enable online presentations, video, screen sharing, sharing of resources, polling and chat. (Chapman & Wiessner, 2008) Research has indicated high levels of interaction in web-conferencing environments. The use of web-conferencing in education has positively [been] received. As a result [faculty] and students gain a quality learning experience.*

Web-conferencing tools like Blackboard have evidently been well received by Universities. A study by Lin & Ha (2009) illustrates how faculty and staff at a number of institutions adopted the use of synchronous learning environment. Data revealed that faculty and staff found Blackboard useful in their work and in non- teaching functions, motivating them to participate in online learning environments. A ten-year study published by Katsifli measured the benefits of those using Blackboard globally (2010). The study concluded that instructors who use the tool for teaching strongly agreed that the Blackboard platform helped them to clearly communicate information about course procedures and requirements. The greatest benefit for lecturers in using the Blackboard software was how it improved teacher student relationships. As the research finding illustrates, it is apparent that using a platform such as Blackboard is beneficial for faculty, staff and students.

Variables such as availability of time, support and staff development can hinder or further the process of learning a new technology tool. The role of faculty or staff no longer becomes face-to-face, but online. "Learning environments can be uncontrollable and require faculty to think differently" (Conceicao, 2006). The use of new technologies has placed additional stress on faculty and [staff] to modify conventional teaching behaviors. Trainings can provide an antidote to individual improvement for faculty and staff especially to those who facilitate at a distance. Applying learned tasks could help in developing the needed online behaviors to adapt to a new learning environment. O'Meara & Rosen 2003 states faculty and [staff] are known to strive to achieve and can be experts in what they have learned. Faculty committed to integrate the use of technology will then follow and gain the needed necessary skills to become effective online instructors and facilitators.

Instructional design has always been an important aspect of training and education. The web-based instructional module was created with the approach and process of the ADDIE model, also known Analyze, Design, Development, Implementation and Evaluation. Hodell (2006) states that

the ADDIE model provides designers with the necessary structure for designing any curriculum, regardless of the instructional methods employed. The elements of the ADDIE model were part of instructional design process. Lessons, as Hodell (2006) mentions are essential within an instructional design module. Lesson plans are the product of assisting facilitators in implementing a course or training as an integral component of a design project. It is important to engage and motivate learners throughout the delivery of the module. According to Gagne, Briggs, Wagner (1988) learners are more likely to retain concepts, skills and procedures taught to them if they are presented in a way that enhances and supports the way the mind works. Gagne's theory "Nine Events of Instruction" supports the concept of motivating the needs of the learner. Connecting ideas like attention, direction, recall, content, feedback, evaluation and closure within an instructional design can assist learners to focus and stay motivated in learning.

Methods

Blackboard Collaborate Learning Module was developed through a manageable easy drag and drop website called Weebly. The online site was created to assist first time users in learning how to use the many aspects of Blackboard Collaborate. This site can be found at http://blkboardcollaborate.weebly.com/ (*Figure 1*) illustrates the online learning module.

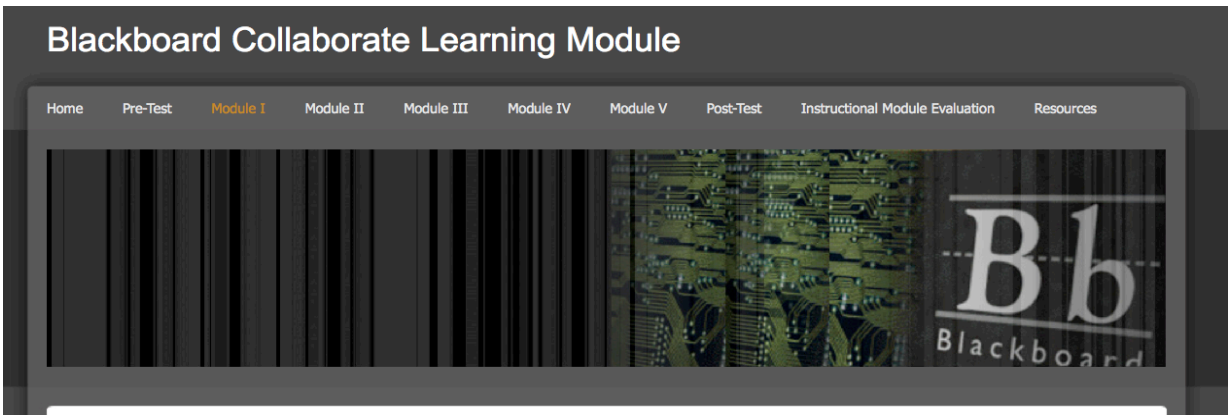


Figure 1. Blackboard Collaborate Learning Module

Module Design

The five instructional training modules address specific Blackboard features. The introductory page begins with a consent form, providing a brief overview of the site's content and the reason for research being conducted. Each module provides an overview and a list of learning objectives. Technology tools were used to assist the process of learning the features of Blackboard. Tools included a downloadable Adobe PDF PowerPoint handout, a guided PowerPoint Voice Thread, and a Jing instructional video. The technology tools were used to accommodate different learning styles. The PowerPoint handouts, Voice Thread and the instructional Jing video corresponds with features addressed in each module. *Figure 2,* illustrates technology tools being used as instructional materials with in the website.

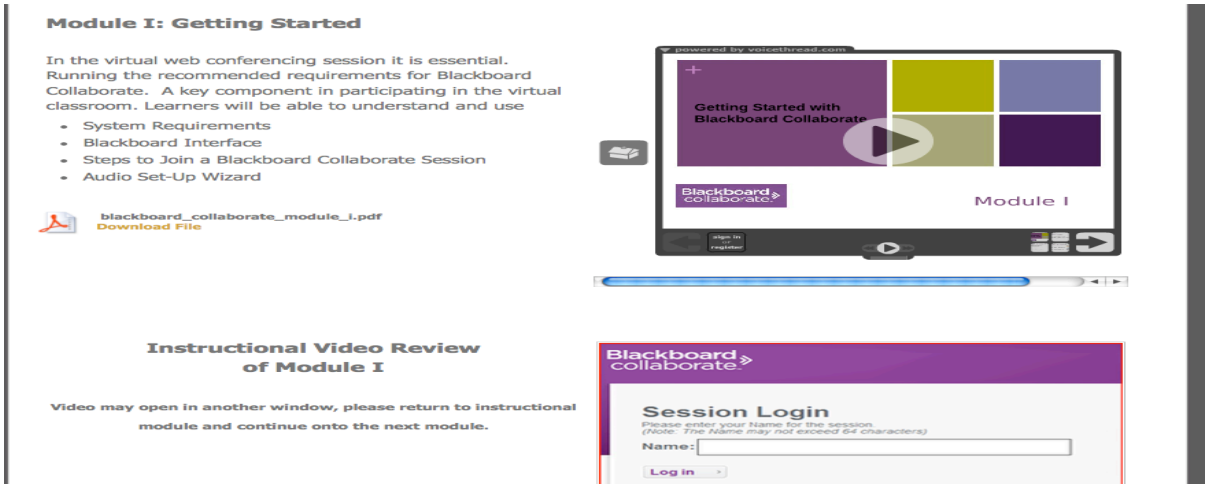


Figure 2. Instructional materials

Module Content

The content and module design was geared for the novice user of Blackboard. The modules were grouped based on related features of Blackboard. The learning modules included: 1) Getting Started With Blackboard Collaborate 2) Managing Communications 3) Content in Various Formats 4) Sharing Support Application and 5) Video and Web Tour. Module One explains the recommended settings, Blackboard interface and steps in joining a session using audio set-up wizard. In Module Two, learners are taught to identify whiteboard content area, participants and managing privileges. Module Three addresses page explorer, content in various formats and how to upload content and material in Blackboard. Module Four illustrates sharing applications and managing moderator permissions. Module Five highlights the web tour interface, how to conduct a web tour and video broadcast. A Pre and Post-test and end evaluation was embedded in the site at the beginning and at the end of instructional module. Participation was completely voluntary. Using a random code generator, participants were identified by number code. Data was then collected anonymously. Pre, post-test and module evaluation were incorporated to assess learner understanding and the effectiveness of the module. Responses from the pre and post- test provided valid data to illustrate the learner's understanding of the module. The instructional module evaluation provided suggested improvements and feedback about the site content and site design.

Module Testing

Prior to implementation of the module, a module prototype was sent to one volunteer faculty and two graduate students from the Online Educational Technology Program. The module feedback included recommendations to improve instructional module design and content. Suggestions included chunking the modules into shorter pieces, embedding module tests as part of the design and keeping a "simple structure, uncluttered and bringing key elements clearly to view (Garcia, Lopez & Liu, 2010). PowerPoint presentations needed to be clarified to fit learner objectives. Suggestions also included resizing fonts and changing font styles. Other suggestions included

corrections in grammatical structure and designing each module in three learning parts instead of two parts. Recommendations were heavily considered. Corrections were executed and implemented into the final instructional module.

Module Implementation

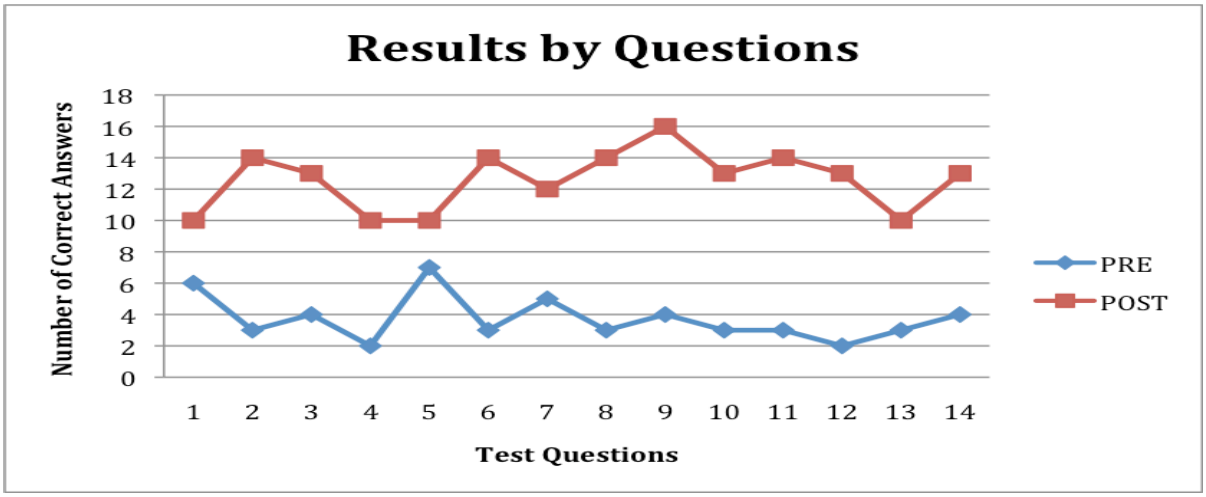
Possible participants were given a reminder E-mail regarding their interest in evaluating the instructional module. Later a formal E-mail, followed with a module link was sent to an anonymous listserv of participants who responded. Participants were asked to complete a consent form at the beginning of the module. Once participants consented, the website directed the learner to begin with the first module. The design of the site was created for learners to independently maneuver through the instructional module step by step. A total of seventeen participants completed all of the learning modules. Participants were given a three-week timeframe to complete the learning module.

Results

Twenty-two participants consented in evaluating the instructional modules but only seventeen completed the learning modules. However, out of the seventeen participants, only thirteen completed the overall module evaluation. Some participants who consented in evaluating the module decided not complete the module. Of the participants who did not complete the module emailed reasons such as "an hour to long to dedicate time in evaluating modules." Interestingly, several participants felt they did not fit the suggested target audience for the research. Those who did participate consisted of University of Hawaii faculty and staff. Ten participants were university faculty and seven were university staff. The pre-test and post-test included fourteen questions based on features addressed in each module.

The data in *graph 1* illustrates participant ability to answer questions correctly in the module pre-test compared to the number of participants who answered the same questions correctly in the post-test. Results show that the number of participants who answered a test question correctly increased for all questions after the completion of the post-test in the instructional module.

Graph 1. Results by Questions



Discussion and Implications

After completion of the five learning modules, participants were encouraged to provide feedback on the use of the training modules. Thirteen out of the seventeen participants provided feedback of their experience of the instructional module. Based on the module evaluation questions (Appendix A) overall participants easily accessed module link. The participants felt the instructional modules were easy to follow. Nine participants felt their experience in going through the instructional module was satisfying. Four participants felt their experience was neutral. Eleven participants felt the most helpful tool for learning in the module was the Jing video screen cast. Two of those participants felt the voice thread presentation was the most valuable learning tool. After the completion of the modules, all participants but one would recommend or share the website with others. The one participant who would not share the module provided an explanation stating "it's hard to learn by just reading and listening, I would need to practice what I learned for me to remember". This statement may imply the module may have not been done in the order to fit the participant needs. Lastly, faculty and staff would most likely use Blackboard Collaborate in facilitation of a meeting, teaching students online and working collaboratively with others.

The module evaluation results provided feedback about site content and site organization. The results indicated the web-based learning module was appealing to users but the navigational interfaces such as the tab headings seemed "overwhelming". Attributes such as homepage and the layout presented on a page, affected the amount of time it took to read the webpage". (Garcia, Lopez & Liu, 2010) When navigational attributes are organized correctly, users move fluidly through the site. Participants also shared their frustrations about links opening up in a new window and how learning materials were place within the site. One of the participants commented the Voice Thread video was not accessible to all "computer operating systems". The audio that accompanied the Voice Thread was loud and clear but the embedded PowerPoint was difficult to see. The Adobe PowerPoint PDF "should have more information to stand alone with out the use of the video". Considerations like rewording pre questions and providing a glossary of words for first time users would have been helpful to understand terms used in the module. Several participants also suggested after the completion of the module to scheduled training like a "learn by doing session" there after would be helpful to reinforce what was learned. For those participants who met all system requirements, site content such as interactive elements provided end users the best learning experience in a web-based learning module. Recommendations suggested by participants need to be considered in the future design of online instructional modules.

Conclusion

The unstable economy has forced public universities and institutions to find other ways to support faculty and staff. The use of Blackboard Collaborate is a powerful medium of widening the access of communication at a distance. Supporting studies have shown universities are using virtual learning platforms as a means of communication. They have discovered that the online learning environment can be an interactive tool to fit the needs of students, faculty and staff.

Despite the implications of faculty and staff being unwilling to learn new technologies, the developed web-based instructional training module provided an approach to learning features of Blackboard Collaborate. With guidance, the web-based training module "was very educational and the instructional piece was refreshing as it was simple enough for anyone". As stated by Farmer 2004, technological competence is not the driving force but efficiency and timeliness is. Results showed that the number of participants to answer a test question correctly increased for all questions after the completion of the post-test in the instructional module. This shows the web-based training module effectively helped faculty and staff familiarize themselves with the features of Blackboard Collaborate. Suggested module feedback from participants will further the development in updating site content and design. Feedback given by participants will be implemented with in the online instructional module for further use for (CTAHR) faculty and staff. Through this experience, faculty and staff who participated in the online instructional module found a new approach for facilitation online.

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Appendix A: Module Feedback Questions

1. Was it easy to access the instructional module link?
2. Your experience of the online instructional module was:
3. Was the instructional module attractive?
4. Was the instructional module easy to follow?
5. Was the instructional module well organized?
6. Did the PowerPoint PDF files help as a guide to assist during the instructional module?
7. Within the instructional module, was the instructional video easy to understand and follow?
8. As a user, which tool was most helpful in learning about the Blackboard Collaborate features?
9. What suggestions would you provide to improve the instructional module?
10. Would you recommend or share the instructional module to others?
11. Blackboard Collaborate would mostly likely used for: Facilitation Online, Teaching Students or Collaborative Work?